
Sequence Listing could not be accepted.

If you need help call the Patent Electronic Business Center at (866) 217-9197 (toll free).

Reviewer: Durreshwar Anjum

Timestamp: [year=2007; month=12; day=13; hr=14; min=24; sec=41; ms=226;

Reviewer Comments:

Seq Id 19 through 23

Invalid response for <213>, It can be either Artificial, Unknown or Genus species.

Please check for the similar errors in subsequent sequences.

Validated By CRFValidator v 1.0.3

Application No: 10511384 Version No: 2.0

Input Set:

Output Set:

Started: 2007-11-28 14:28:36.627

Finished: 2007-11-28 14:28:41.238

Elapsed: 0 hr(s) 0 min(s) 4 sec(s) 611 ms

Total Warnings: 229

Total Errors: 0

No. of SeqIDs Defined: 229

Actual SeqID Count: 229

| Error code | | Error Description |
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| W | 213 | Artificial or Unknown found in <213> in SEQ ID (1) |
| W | 213 | Artificial or Unknown found in <213> in SEQ ID (2) |
| W | 213 | Artificial or Unknown found in <213> in SEQ ID (3) |
| W | 213 | Artificial or Unknown found in <213> in SEQ ID (4) |
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| W | 213 | Artificial or Unknown found in <213> in SEQ ID (6) |
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| W | 213 | Artificial or Unknown found in <213> in SEQ ID (8) |
| W | 213 | Artificial or Unknown found in <213> in SEQ ID (9) |
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| W | 213 | Artificial or Unknown found in <213> in SEQ ID (13) |
| W | 213 | Artificial or Unknown found in <213> in SEQ ID (14) |
| W | 213 | Artificial or Unknown found in <213> in SEQ ID (15) |
| W | 213 | Artificial or Unknown found in <213> in SEQ ID (16) |
| W | 213 | Artificial or Unknown found in <213> in SEQ ID (17) |
| W | 213 | Artificial or Unknown found in <213> in SEQ ID (18) |
| W | 402 | Undefined organism found in <213> in SEQ ID (19) |
| W | 402 | Undefined organism found in <213> in SEQ ID (20) |

Input Set:

Output Set:

Started: 2007-11-28 14:28:36.627

Finished: 2007-11-28 14:28:41.238

Elapsed: 0 hr(s) 0 min(s) 4 sec(s) 611 ms

Total Warnings: 229
Total Errors: 0

No. of SeqIDs Defined: 229

Actual SeqID Count: 229

| Error code | | Error Description |
|------------|-----|---|
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| W | 402 | Undefined organism found in <213> in SEQ ID (23) |
| W | 402 | Undefined organism found in <213> in SEQ ID (24) |
| W | 402 | Undefined organism found in <213> in SEQ ID (25) |
| W | 402 | Undefined organism found in <213> in SEQ ID (26) |
| W | 402 | Undefined organism found in <213> in SEQ ID (27) |
| W | 402 | Undefined organism found in <213> in SEQ ID (28) |
| W | 402 | Undefined organism found in <213> in SEQ ID (29) |
| W | 402 | Undefined organism found in <213> in SEQ ID (30) |
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| W | 402 | Undefined organism found in <213> in SEQ ID (36) |
| W | 402 | Undefined organism found in <213> in SEQ ID (37) |
| W | 402 | Undefined organism found in $\langle 213 \rangle$ in SEQ ID (38) This error has occured more than 20 times, will not be displayed |

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| <130> | 976-19 PCT/US | |
| <140> | 10511384 | |
| <141> | 2007-11-28 | |
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| | CU 2002/0076 | |
| <151> | 2002-04-15 | |
| <150> | EP98001000 | |
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<213> Artificial Sequence

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cctaggttaa acaggaggag
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 20 25 30
Glu Ala Leu Ala Leu Glu Leu Glu Thr Tyr Arg Leu Glu His
     35
            40
                                 45
Ile Ser His Ile Ser Ala Leu Ala Leu Tyr Ser Thr Arg Pro Ser Glu
  50 55 60
Arg Gly Leu Asn Ala Leu Ala Ala Leu Ala Pro Arg Met Glu Thr Ala
65 70 75 80
Leu Ala Gly Leu Gly Leu Tyr Gly Leu Tyr Gly Leu Tyr Gly Leu Asn
          85
                  90
Ala Ser Asn His Ile Ser His Ile Ser Gly Leu Val Ala Leu Val Ala
    100 105 110
Leu Leu Tyr Ser Pro His Glu Met Glu Thr Ala Ser Pro Val Ala Leu
              120
     115
                             125
Thr Tyr Arg Gly Leu Asn Ala Arg Gly Ser Glu Arg Thr Tyr Arg Cys
 130 135 140
Tyr Ser His Ile Ser Pro Arg Ile Leu Glu Gly Leu Thr His Arg Leu
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145 150 155

19

| Glu | Val | Ala | Leu | Ala 165 | Ser | Pro | Ile | Leu | Glu 170 | Pro | His | Glu | Gly | Leu 175 | Asn |
|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| Gly | Leu | Thr | Tyr 180 | Arg | Pro | Arg | Ala | Ser 185 | Pro | Gly | Leu | Ile | Leu 190 | Glu | Gly |
| | Thr | 195 | | | | | 200 | | | | | 205 | | | |
| | Arg 210 | | | | | 215 | | | | | 220 | | | | |
| 225 | Gly | | | | 230 | | | | | 235 | | | | | 240 |
| | Tyr | | | 245 | | | | | 250 | | | | | 255 | |
| Glu | Arg | Ala | 260 Ser | Asn | Ile | Leu | Glu | 265 Thr | His | Arg | Met | Glu | 270 Thr | Gly | Leu |
| Asn | Ile | 275 Leu | Glu | Met | Glu | Thr | 280 Ala | Arg | Gly | Ile | Leu | 285 Glu | Leu | Tyr | Ser |
| Pro | 290 Arg | His | Ile | Ser | Gly | 295 Leu | Asn | Gly | Leu | Tyr | 300 Gly | Leu | Asn | His | Ile |
| 305 Ser | Ile | Leu | Glu | - | 310 Leu | Tyr | Gly | Leu | | 315 Glu | Thr | Ser | Glu | _ | 320 Pro |
| His | Glu | Leu | | 325 Gly | Leu | Asn | His | | 330 Ser | Ala | Ser | Asn | | 335 Tyr | Ser |
| Cys | Tyr | Ser 355 | 340 Gly | Leu | Суз | Tyr | Ser 360 | 345 Ala | Arg | Gly | Pro | Arg | 350 Leu | Tyr | Ser |
| Leu | Tyr 370 | | Ala | Ser | Pro | Ala 375 | | Gly | Ala | Leu | Ala 380 | | Arg | Gly | Gly |

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385 390 395 400

Pro Arg Ala Arg Gly Ala Arg Gly 405

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<213> VEGF121 Isoform

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<210> 21

<211> 408

<212> PRT

<213> VEGF mutated isoform

<400> 21

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1 10 15

Thr Arg Pro Val Ala Leu His Ile Ser Thr Arg Pro Ser Glu Arg Leu 20 25 30

Glu Ala Leu Ala Leu Glu Leu Glu Leu Glu Thr Tyr Arg Leu Glu His $35 \hspace{1.5cm} 40 \hspace{1.5cm} 45 \hspace{1.5cm}$

Ile Ser His Ile Ser Ala Leu Ala Leu Tyr Ser Thr Arg Pro Ser Glu
50 55 60

Arg Gly Leu Asn Ala Leu Ala Ala Leu Ala Pro Arg Met Glu Thr Ala 65 70 75 80

| Leu | Ala | Gly | Leu | Gly 85 | Leu | Tyr | Gly | Leu | Tyr 90 | Gly | Leu | Tyr | Gly | Leu 95 | Asn |
|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| Ala | Ser | Asn | His 100 | Ile | Ser | His | Ile | Ser 105 | Gly | Leu | Val | Ala | Leu 110 | Val | Ala |
| Leu | Leu | Tyr 115 | Ser | Pro | His | Glu | Met 120 | Glu | Thr | Ala | Ser | Pro 125 | Val | Ala | Leu |
| Thr | Tyr 130 | Arg | Gly | Leu | Asn | Ala 135 | Arg | Gly | Ser | Glu | Arg 140 | Thr | Tyr | Arg | Суз |
| Tyr 145 | Ser | His | Ile | Ser | Pro 150 | Arg | Ile | Leu | Glu | Gly 155 | Leu | Thr | His | Arg | Leu 160 |
| Glu | Val | Ala | Leu | Ala 165 | Ser | Pro | Ile | Leu | Glu 170 | Pro | His | Glu | Gly | Leu 175 | Asn |
| Gly | Leu | Thr | Tyr 180 | Arg | Pro | Arg | Ala | Ser 185 | Pro | Gly | Leu | Ile | Leu 190 | Glu | Gly |
| Leu | Thr | Tyr 195 | Arg | Ile | Leu | Glu | Pro 200 | His | Glu | Leu | Tyr | Ser 205 | Pro | Arg | Ser |
| Glu | Arg 210 | Суз | Tyr | Ser | Val | Ala 215 | Leu | Pro | Arg | Leu | Glu 220 | Met | Glu | Thr | Ala |
| Arg 225 | Gly | Суз | Tyr | Ser | Gly 230 | Leu | Tyr | Gly | Leu | Tyr 235 | Cys | Tyr | Ser | Cys | Tyr 240 |
| | | | Asn | 245 | | | | | 250 | | | | | 255 | |
| | | | Val 260 | | | | | 265 | | | | | 270 | | |
| | | 275 | Ser | | | | 280 | | | | | 285 | | | |
| Asn | 11e 290 | Leu | Glu | Met | Glu | Thr 295 | Ala | Leu | Ala | Ile | 100 300 | Glu | Ala | Leu | Ala |

Pro Arg Ala Leu Ala Gly Leu Asn Gly Leu Tyr Gly Leu Asn His Ile

305 310 315 320

Ser Ile Leu Glu Gly Leu Tyr Gly Leu Met Glu Thr Ser Glu Arg Pro 325 330 335

His Glu Leu Glu Gly Leu Asn His Ile Ser Ala Ser Asn Leu Tyr Ser 340 345 350

Cys Tyr Ser Gly Leu Cys Tyr Ser Ala Arg Gly Pro Arg Leu Tyr Ser 355 360 365

Leu Tyr Ser Ala Ser Pro Ala Arg Gly Ala Leu Ala Ala Arg Gly Gly 370 380

Leu Asn Gly Leu Leu Tyr Ser Cys Tyr Ser Ala Ser Pro Leu Tyr Ser 385 390 395 400

Pro Arg Ala Arg Gly Ala Arg Gly 405

<210> 22

<211> 444

<212> DNA

<213> VEGF mutated isoform

<400> 22

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<210> 23

<211> 887

<212> PRT

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<400> 23

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| Leu Glu A | Ala Leu Al 20 | a Val Ala | a Leu Al <i>a</i> 25 | Leu Ala | Leu Glu | Thr Arg | Pro |
| | Cys Tyr S∈ 35 | r Val Ala | a Leu Gly 40 | Leu Thr | His Arg 45 | Ala Arg | Gly |
| Ala Leu A 50 | Ala Ala Le | u Ala Ser 55 | Glu Arg | Val Ala | Leu Gly | Leu Tyr | Leu |
| 65 | Arg Ser Gl | 70 | | 75 | - | | 80 |
| | Glu Pro Ai | | | 90 | | 95 | |
| - | Asn Leu Ty 100 Leu Glu Le | | 105 | | | 110 | |
| 1 | l15 Arg Leu Gl | | 120 | | 125 | | |
| 130 | Arg Gly Gl | 135 | 5 | | 140 | | _ |
| 145 | Ala Ser Pı | 150 | | 155 | | | 160 |
| Ser Asn A | 16 Ala Ser As | | ı Asn Ser | 170 Glu Arg | Gly Leu | 175 | Glu |
| Arg Gly I | 180 Leu Gly Le | u Asn Ala | 185 a Arg Gly | | Leu Gly | 190 Leu Val | Ala |
| | .95 His Arg Gl | y Leu Cys | 200 Tyr Ser | Ser Glu | 205 Arg Ala | Ser Pro | Gly |
| 210 | | 215 | 5 | | 220 | | |

Leu Tyr Leu Glu Pro His Glu Cys Tyr Ser Leu Tyr Ser Thr His Arg

| 225 | 230 | 235 | 240 |
|-----|-----|-----|-----|
| | | | |

Leu Glu Thr His Arg Ile Leu Glu Pro Arg Leu Tyr Ser Val Ala Leu 245 250 255

Ile Leu Glu Gly Leu Tyr Ala Ser Asn Ala Ser Pro Thr His Arg Gly 260 265 270

Leu Tyr Ala Leu Ala Thr Tyr Arg Leu Tyr Ser Cys Tyr Ser Pro His 275 280 285

Glu Thr Tyr Arg Ala Arg Gly Gly Leu Thr His Arg Ala Ser Pro Leu 290 295 300

Glu Ala Leu Ala Ser Glu Arg Val Ala Leu Ile Leu Glu Thr Tyr Arg 305 310 315 320

Val Ala Leu Thr Tyr Arg Val Ala Leu Gly Leu Asn Ala Ser Pro Thr 325 330 335

Tyr Arg Ala Arg Gly Ser Glu Arg Pro Arg Pro His Glu Ile Leu Glu 340 345 350

Ala Leu Ala Ser Glu Arg Val Ala Leu Ser Glu Arg Ala Ser Pro Gly 355 360 365

Leu Asn His Ile Ser Gly Leu Tyr Val Ala Leu Val Ala Leu Thr Tyr 370 375 380

Arg Ile Leu Glu Thr His Arg Gly Leu Ala Ser Asn Leu Tyr Ser Ala 385 390 395 400

Ser Asn Leu Tyr Ser Thr His Arg Val Ala Leu Val Ala Leu Ile Leu 405 410 415

Glu Pro Arg Cys Tyr Ser Leu Glu Gly Leu Tyr Ser Glu Arg Ile Leu
420 425 430

Glu Ser Glu Arg Ala Ser Asn Leu Glu Ala Ser Asn Val Ala Leu Ser 435 440 445

Glu Arg Leu Glu Cys Tyr Ser Ala Leu Ala Ala Arg Gly Thr Tyr Arg 450 455 460

| Pro 465 | Arg | Gly | Leu | Leu | Tyr 470 | Ser | Ala | Arg | Gly | Pro 475 | His | Glu | Val | Ala | Leu 480 |
|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
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| Glu | Ser | Glu | Arg 500 | Thr | Arg | Pro | Ala | Ser 505 | Pro | Ser | Glu | Arg | Leu 510 | Tyr | Ser |
| Leu | Tyr | Ser 515 | Gly | Leu | Tyr | Pro | His 520 | Glu | Thr | His | Arg | Ile 525 | Leu | Glu | Pro |
| Arg | Ser 530 | Glu | Arg | Thr | Tyr | Arg 535 | Met | Glu | Thr | Ile | Leu 540 | Glu | Ser | Glu | Arg |
| Thr 545 | Tyr | Arg | Ala | Leu | Ala 550 | Gly | Leu | Tyr | Met | Glu 555 | Thr | Val | Ala | Leu | Pro 560 |
| His | Glu | Cys | Tyr | Ser 565 | Gly | Leu | Ala | Leu | Ala 570 | Leu | Tyr | Ser | Ile | Leu 575 | Glu |
| Ala | Ser | Asn | Ala 580 | Ser | Pro | Gly | Leu | Ser 585 | Glu | Arg | Thr | Tyr | Arg 590 | Gly | Leu |
| Asn | Ser | Glu 595 | Arg | Ile | Leu | Glu | Met 600 | Glu | Thr | Thr | Tyr | Arg 605 | Ile | Leu | Glu |
| Val | Ala 610 | Leu | Val | Ala | Leu | Val 615 | Ala | Leu | Val | Ala | Leu 620 | Gly | Leu | Tyr | Thr |
| Tyr 625 | Arg | Ala | Arg | Gly | Ile 630 | Leu | Glu | Thr | Tyr | Arg 635 | Ala | Ser | Pro | Val | Ala 640 |
| Leu | Val | Ala | Leu | Leu 645 | Glu | Ser | Glu | Arg | Pro 650 | Arg | Ser | Glu | Arg | His 655 | Ile |
| Ser | Gly | Leu | Tyr 660 | Ile | Leu | Glu | Gly | Leu 665 | Leu | Glu | Ser | Glu | Arg 670 | Val | Ala |